

**OCCUPATIONAL SAFETY  
AND HEALTH STANDARDS BOARD**

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NOTICE OF PROPOSED MODIFICATION TO  
CALIFORNIA CODE OF REGULATIONS

TITLE 8: Chapter 4, Subchapter 2, Article 4, Section 769  
of the Boiler and Fired Pressure Vessel Safety Orders  
and  
TITLE 24: Part 4, Chapter 10, Section 1016.0  
of the California Mechanical Code

Boiler Installation

Pursuant to Government Code Section 11346.8(c), the Occupational Safety and Health Standards Board (Board) gives notice of the opportunity to submit written comments on the above-named regulations in which modifications are being considered as a result of Board staff consideration.

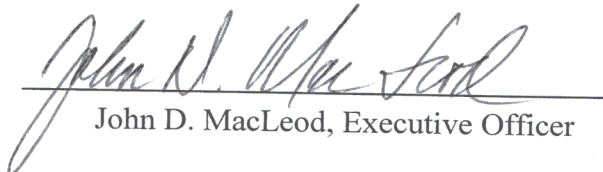
Pursuant to the passage of AB 3000 (Stats. 2002, c. 1124) and ensuing changes to Health and Safety Code Section 18909(j) and Labor Code Section 142.3, standards adopted by the Occupational Safety and Health Standards Board are no longer subject to review and approval by the California Building Standards Commission. AB 3000 was approved by the Governor and filed with the Secretary of State on September 30, 2002.

A copy of the full text of the regulations as originally proposed, and a copy of the pages with the modifications clearly indicated, are attached for your information. In addition, a summary of the modifications is included. Any written comments on these modifications must be received by 5:00 p.m. on November 6, 2002 at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833. The regulations will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board's rulemaking files on the proposed action are open to public inspection Monday through Friday, from 8:00 a.m. to 5:00 p.m., at the address shown above.

Inquiries concerning the proposed changes may be directed to the Executive Officer, John D. MacLeod, at (916) 274-5721.

OCCUPATIONAL SAFETY AND HEALTH  
STANDARDS BOARD

  
John D. MacLeod, Executive Officer

Date: October 21, 2002

**REGULATIONS AS ORIGINALLY PROPOSED**

STANDARDS PRESENTATION  
TO  
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,  
TITLE 8, CHAPTER 4

Amend Section 769 as follows:

§769. Boiler ~~Supports~~ Installation.

(a) Effective for boiler installation and/or relocation building permits issued on or after November 1, 2002, All boiler supporting structures shall be designed for the following loadings:

(1) The live and dead load of the boiler as prescribed in the 2001 California Building Code.

(2) Other imposed loads including those resulting from ~~temperature changes~~ wind, and seismic forces, as prescribed in the 2001 California Building Code.

~~(3) A horizontal seismic force not less than 0.1W, where W is the sum of all live and dead loads at and above the plane or elevation under consideration.~~

~~(b) The stresses used in the design of the supporting structure shall conform to the recommendation of the American Institute of Steel Construction (A.I.S.C.).~~

~~(e)~~(b) Each member of a structural support shall be so located or insulated that the heat from the boiler cannot warp or impair its strength.

~~(d)~~(c) The installation of water-tube boilers in battery settings shall be prohibited unless provisions are made at the time of installation to make possible the periodic inspection of the exterior surfaces of all heads installed in the common wall.

~~(e)~~(d) The installation of horizontal tubular boilers in battery settings shall be prohibited, unless the boilers are suspended by independent outside suspension structures with top crossbeams sufficiently strong to safely carry all the boilers without intermediate supports.

~~(f)~~(e) Each boiler shall be installed in such a manner that all external surfaces and all appurtenances can be made accessible for inspection, cleaning, maintenance, and operation.

(f) Adequate passageways or work areas at least 24 inches wide shall be provided for safe access to and operation of controls. ~~(Title 24, T8-769)~~

(Title 24, Part 4, Section 1016.1)

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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TO  
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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PROPOSED STATE STANDARD  
TITLE 24, PART 4, CHAPTER 10

Amend Section 1016.0 by adding a new subsection as follows:

SECTION 1016.0 — MOUNTING

Equipment shall be set or mounted on a level base capable of supporting and distributing the weight contained thereon.

Boilers, tanks and equipment shall be securely anchored to the structure.

Equipment requiring vibration isolation shall be installed as designed by a registered engineer to the satisfaction of the Administrative Authority.

1016.1 [For DOSH] Boiler Installation.

1016.1.1 All boiler supporting structures shall be designed for the following loads:

1016.1.1.1 The live and dead load of the boiler as prescribed in the 2001 California Building Code.

1016.1.1.2 Other imposed loads including those resulting from wind, and seismic forces, as prescribed in the 2001 California Building Code.

1016.1.2 Each member of a structural support shall be so located or insulated that the heat from the boiler cannot warp or impair its strength.

1016.1.3 The installation of water-tube boilers in battery settings shall be prohibited unless provisions are made at the time of installation to make possible the periodic inspection of the exterior surfaces of all heads installed in the common wall.

1016.1.4 The installation of horizontal tubular boilers in battery settings shall be prohibited, unless the boilers are suspended by independent outside suspension structures with top crossbeams sufficiently strong to safely carry all the boilers without intermediate supports.

1016.1.5 Each boiler shall be installed in such a manner that all external surfaces and all appurtenances can be made accessible for inspection, cleaning, maintenance, and operation.

1016.1.6 Adequate passageways or work areas at least 24 inches wide shall be provided for safe access to and operation of controls.

Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code; and Section 13241, Health and Safety Code.

**PROPOSED MODIFICATIONS**  
(Modifications are indicated by bold,  
double underline for new language and bold,  
double strikeout for deleted language.)

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PROPOSED STATE STANDARD,  
TITLE 8, CHAPTER 4

Amend Section 769 to remove all parenthetical Title 24 references as follows:

§769. Boiler ~~Supports~~ Installation.

(a) Effective for boiler installation and/or relocation building permits issued on or after November 1, 2002, Aall boiler supporting structures shall be designed for the following loadings:

(1) The live and dead load of the boiler as prescribed in the 2001 California Building Code.

(2) Other imposed loads including those resulting from ~~temperature changes~~ wind, and seismic forces, as prescribed in the 2001 California Building Code.

~~(3) A horizontal seismic force not less than 0.1W, where W is the sum of all live and dead loads at and above the plane or elevation under consideration.~~

~~(b) The stresses used in the design of the supporting structure shall conform to the recommendation of the American Institute of Steel Construction (A.I.S.C.).~~

~~(e)~~(b) Each member of a structural support shall be so located or insulated that the heat from the boiler cannot warp or impair its strength.

~~(d)~~(c) The installation of water-tube boilers in battery settings shall be prohibited unless provisions are made at the time of installation to make possible the periodic inspection of the exterior surfaces of all heads installed in the common wall.

~~(e)~~(d) The installation of horizontal tubular boilers in battery settings shall be prohibited, unless the boilers are suspended by independent outside suspension structures with top crossbeams sufficiently strong to safely carry all the boilers without intermediate supports.

~~(f)~~(e) Each boiler shall be installed in such a manner that all external surfaces and all appurtenances can be made accessible for inspection, cleaning, maintenance, and operation.

(f) Adequate passageways or work areas at least 24 inches wide shall be provided for safe access to and operation of controls. ~~(Title 24, T8-769)~~

~~(Title 24, Part 4, Section 1016.1)~~

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.



STANDARDS PRESENTATION  
TO  
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD  
TITLE 24, PART 4, CHAPTER 10

Amend Section 1016.0 by removing the proposed new subsection as follows:

SECTION 1016.0 — MOUNTING

Equipment shall be set or mounted on a level base capable of supporting and distributing the weight contained thereon.

Boilers, tanks and equipment shall be securely anchored to the structure.

Equipment requiring vibration isolation shall be installed as designed by a registered engineer to the satisfaction of the Administrative Authority.

~~1016.1 [For DOSH] Boiler Installation.~~

~~1016.1.1 All boiler supporting structures shall be designed for the following loads:~~

~~1016.1.1.1 The live and dead load of the boiler as prescribed in the 2001 California Building Code.~~

~~1016.1.1.2 Other imposed loads including those resulting from wind, and seismic forces, as prescribed in the 2001 California Building Code.~~

~~1016.1.2 Each member of a structural support shall be so located or insulated that the heat from the boiler cannot warp or impair its strength.~~

~~1016.1.3 The installation of water tube boilers in battery settings shall be prohibited unless provisions are made at the time of installation to make possible the periodic inspection of the exterior surfaces of all heads installed in the common wall.~~

~~1016.1.4 The installation of horizontal tubular boilers in battery settings shall be prohibited, unless the boilers are suspended by independent outside suspension structures with top crossbeams sufficiently strong to safely carry all the boilers without intermediate supports.~~

~~1016.1.5 Each boiler shall be installed in such a manner that all external surfaces and all appurtenances can be made accessible for inspection, cleaning, maintenance, and operation.~~

~~1016.1.6 Adequate passageways or work areas at least 24 inches wide shall be provided for safe access to and operation of controls.~~

~~Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code, and Section 13241, Health and Safety Code.~~

## **SUMMARY OF MODIFICATIONS**



## **SUMMARY OF MODIFICATIONS**

### **Boiler Installation**

#### **TITLE 8: Section 769. Boiler Supports.**

A modification is proposed to delete the parenthetical reference: "Title 24, Part 4, Section 1016.1" located at the end of the Section.

#### **TITLE 24: Section 1016.0—Mounting**

A modification is proposed to delete all proposed regulatory language beginning with Section 1016.1 through 1016.1.6.

These modifications are necessary to comply with the passage of AB 3000 which exempts the Occupational Safety and Health Standards Board from having to submit Title 8 standards to the California Building Standards Commission for review and approval.